

DIRECT CsI SCINTILLATOR COATING FOR
IMPROVED DIGITAL X-RAY DETECTOR
ASSEMBLY LONGEVITY

ABSTRACT

The present invention provides an X-ray detector assembly and a fabrication method, where the X-ray detector assembly comprises a scintillator material disposed on a detector matrix array disposed on a detector substrate; an encapsulating coating disposed on the scintillator material; a moisture resistant cover disposed over the detector substrate and the encapsulating coating, and an adhesive material disposed between the detector substrate and the moisture resistant cover so as to form a moisture vapor barrier. The adhesive material is disposed so that it is not in contact with the encapsulating coating. The fabrication method of the X-ray detector assembly includes the steps of disposing the encapsulating coating on the scintillator material and a portion of the detector substrate and removing the encapsulating coating from the portion of the detector substrate.